

## 田 川 基 二\*: 羊 齒 類 雜 說 (3)

## Motozi TAGAWA\*: Fern miscellany (3)

(32) **Isoetes japonica** Al. Br. Verh. Bot. Ver. Brandenb. **4**: 329. 1862.

Southern Korea: in paludosis Taiku, Faurie 128 (K\*\*).

New to Korea. This species was founded on Wichura & Schottmüller's collection from Yokohama, and previously only known from Japan.

(33) **Dennstaedtia hirsuta** (Sw.) Mett.; Tagawa, J. Jap. Bot. **14**: 705. 1938.

var. **typica** f. **cristata** (Nakai) et f. **laciniata** (Nakai) Tagawa, comb. nov.—*Microlepia pilosella* f. *cristata* Nakai et var. *laciniata* Nakai, Bot. Mag. Tokyo **44**: 508. 1930. Japan.

var. **bipinnata** (H. Ito) Tagawa, comb. nov.—*M. pilosella* var. *bipinnata* H. Ito. Journ. Jap. Bot. **9**: 59. 1933. Japan.

(34) **Athyrium mesosorum** (Makino) Makino, Bot. Mag. Tokyo **13**: 82. 1899.

This species, well described by Makino upon Japanese specimens and known previously only from that islands, may now be reported from several localities in southern Korea on the basis of Chang's collections. These agree perfectly with Japanese specimens.

Prov. Zenhoku: Mt. Mantoku, Chang 660 (K); Mt. Rorei, Chang 316 (K).  
Prov. Zennan: Mt. Hakuyo, Chang 798 (K).

(35) **Dryopteris lacera** (Thunb.) O. Ktze. var. **peninsulae** (Kitagawa) Tagawa, Journ. Jap. Bot. **14**: 101. 1938. Type from South Manchuria.—*D. neolacera* Ching, Bull. Fan Mem. Inst. Biol. **8**: 449. 1938. Type from Hupeh, China.

South Manchuria to central China.

(36) **Polystichum Tsus-Simense** (Hook.) J. Sm.

In Formosa this species is very rare and hitherto known only from Arisan (cf. Hayata, Ic. Pl. Form. **4**: 201. 1914). Additional specimens are

Prov. Takao: between Masuhoaru and Nakanoseki, Kizan-gun, Tagawa 1201 (K).  
Prov. Kwarenko: between Sasarabi and Miyasan, Tamazatogun, Tagawa 3438 (K);  
between Tomasu and Sasarabi, Tamazato-gun, Tagawa 3439 (K); between Tosato and Totokun, Tamazato-gun, Tagawa 3588 (K).

(37) **Cyrtomium taiwanianum** Tagawa, Acta Phytotax. Geobot. **7**: 78. 1938.

\* 京都大學理學部植物學教室 Department of Botany, Faculty of Science, University of Kyoto, Kyoto.

\*\* K and T indicate the Herbarium of the Univ. of Kyoto and of the Univ. of Tokyo respectively.

A distinct species characterized by the hat-like indusia covering much elevated sori, and previously only known from the type collection. This species is rather wide-spread in Formosa; additional specimens are

Prov. Kwarenko: between Kirai and Higasinôkô, Kwaren-gun, Tagawa 3287(K).  
Prov. Takao: between Masuhoaru and Nakanoseki, Kizangun, Tagawa 1236 (K).  
Prov. Taito: near Kakayo, Kwanzan-gun, Tawawa 3063, 3064 (K).

(38) **Ctenitis Kawakamii** (Hayata) Ching, Bull. Fan Mem. Inst. Biol. **8**: 286. 1938; Tagawa, Acta Phytotax. Geobot. **8**: 95. 1939.—*Dryopteris Kawakamii* Hayata, Mat. Fl. Form. 416. 1911. Type from Formosa.—*D. mariformis* Rosenst. in Fedde, Repert. Sp. Nov. **13**: 131. 1914. Type from Kweichow.—*C. mariformis* (Rosenst.) Ching, 1. c.

China. Szechwan: Tahsiangling, ad pedem subumbrosam praeruptorum, ca. 1300 m. alt., H. Smith 10154 (K), recieved as *D. heterolaena* C. Chr. Formosa. Prov. Kwarenkô: inter Sekigahara et Gôkwan, ca. 2800 m. alt., Tagawa 869 (K).

Chinese *C. mariformis* is, as has been supposed by Ching, no more than a less cut form of *C. Kawakamii* from Formosa: Smith 10154 and Tagawa 869 represent typical form of *C. mariformis*.

(39) **Leptogramma tottoides** H. Ito, Bot. Mag. Tokyo **49**: 434. 1935. Type from Formosa.—*L. totta* var. *tottoides* (H. Itô) H. Itô in Nakai et Honda, Nov. Fl. Jap. No. 4. 166. 1939.—*L. caudata* Ching, Sinensia **7**: 98. pl. 4. 1936. Type from Fukien.

Korea. In umbrosis Quelpaert, Faurie 67 (K). New to Korea, previously known from Formosa and Fukien. With the authentic specimen (Faurie 592 from Arisan, Formosa) of *L. caudata* in hand, I can distinguish it in no way from *L. tottoides*.

(40) **Phymatodes quasidivariata** (Hayata) Ching, Contr. Inst. Biol. Nat. Acad. Peiping **2**: 87. 1933, cum syn. Type from Formosa.—*Ph. Stracheyi* Ching, 1. c. 83, cum syn. Type from North India.

Formosa and China to North India.

(41) **Colysis simplicifrons** (Christ) Tagawa, comb. nov.—*Polypodium ellipticum* var. *simplicifrons* Christ, Bull. Herb. Boiss. ser. 2. **2**: 832. 1902. Type from Nagasaki, Japan.—*C. elliptica* var. *pothifolia* f. *simplex* Ching, Bull. Fan Mem. Inst. Biol. **4**: 335. 1933. Type from South China.

This fern stands intermediate between *C. elliptica* and *C. Wrightii*, but differs from the former in having the simple or irregularly pinnatifid frond and the stipe narrowly winged upwards. From *C. Wrightii* it differs in the frond which is often

irregularly pinnatifid, the obscure venation, the plane margin, and in the narrower wing of the stipe not extending below the centre.

Rhizome long-creeping, ca 3 mm. thick when dry, densely scaly; scales thin, fuscous-brown or brown, clathrate, subulate-lanceolate from a broad-ovate base, ca. 3 mm. long, long-acuminate, very sparsely denticulate or nearly entire, the base deeply cordate. Leaves distant, very polymorphic, long-stipitate; stipe usually much longer than the lamina, 15–30 cm or sometimes to 40 cm long, stramineous when dry, glabrous, but sparsely scaly near the base, narrowly winged on the upper portion; lamina simple, or the lower part irregularly lobed or protruding 1–3 pairs of pinnae, the base long-decurrent along the stipe forming a narrow wing on each side; simple lamina lanceolate or narrowly lanceolate, 15–20 cm long by 1.5–4 cm wide, entire or undulate, or irregularly lobed below, broadest at the middle or sometimes above the base, chartaceous, glabrous, the margin plane; pinnae 1–2 on each side below a larger terminal one, lanceolate, acuminate, usually narrowed below, to 12 cm long; venation obscure, the lateral main veins usually indistinct. Sori as in *C. Wrightii*.

Japan. Kyûsyû, and in southern Honsyû. North to Quelpart, and south to Liu Kiu; according to Ching also found in Formosa and South China. Specimens examined: Japan. Pref. Wakayama: Sitigawa-mura, Higasimuro-gun, collector unknown (K); Kogawa-mura, Higasimuro-gun, Nakazima (K, T). Pref. Nagasaki: in humidis basi montium Nagasaki, Faurie 4987 (K); duplicate type; near Nagasaki, Tasiro (K). Mogi, Tairo (K). Pref. Hukuoka: Sasaguri-mura, Kasuya-gun, Doki (K). Pref. Kumamoto: Kawaharu-mura, Kamimasiki-gun, Kôzuma (K); along the Riv. Kuma, Asikita-gun, Kaneda (K); Yosio-mura, Asikita-gun, Kaneda (K); Koonse, Kumagun, Maebara 383, 625 (K, T); Sinomatukuma, Yatusiro-gun, Maebara 776 (K). Pref. Kagosima: Hinotani, Izumi, Sin (K); Sinoôkawati, Izumi-gun, Doi 137 (K); Mt. Takakuma, Doi 90 (K).

Korea. Seikiho, Quelpart, Chang 379 (K). Liu Kiu. Mt. Onna, Isl. Okinawa, Sakaguti (K). Isl. Kumesima, Tawada 11 (K).

(42) **Prosaptia intermedia** (Ching) Tagawa, comb. nov. — *Polypodium urceolare* Hayata var. *intermedium* Ching, Bull. Dept. Biol. Sun Yatsen Univ. No. 6. 32. 1933. Type from Yaoshan, Kwangsi. — *Pr. urceolaris* (Hayata) Copel. var. *intermedia* (Ching) Ching, Bull. Fan Mem. Inst. Biol. **10**: 17. 1940. — *Pol. urceolare* Hayata sensu Wu, Wong et Pong, Polypodiace. Yaosh. 330. pl. 156. 1932.

China. Kwangsi: Yaoshan, Sin 209 (K).

Near *Pr. urceolaris*, but differs from it by the subacute segments less hairy beneath, the thinner, subcoriaceous (not carnosio-coriaceous) texture and by the shallower, supramedial (not submarginal) soral cavities.

(43) *Ceratopteris thalictroides* (L.) Brongn.

A fresh-warmer fern, widely spread in Tropics and Subtropics of the Old World. This species may now be recorded from South Korea on the basis of Chang's No. 3142 (K), collected at Zyuntun.

(32) *Isoetes japonica* Al. Br. ミヅニラは南鮮にもある。

(33) イヌシダの変種や品種の學名を, *Dennstaedtia hirsuta* (Sw.) Mett. var. *typica* f. *cristata* (Nakai) Tagawa シンイヌシダ, f. *laciniata* (Nakai) Tagawa フギレイヌシダ, var. *bipinnata* (H. Ito) Tagawa カラクサイヌシダと改める。

(34) *Athyrium mesosorum* (Makino) Makino ヌリワラビは南鮮の萬徳山, 蘆嶺, 白羊山にもある。

(35) 支那の *Dryopteris neolacera* Ching は南滿洲の *D. lacera* (Thunb.) O. Ktze. var. *peninsulae* (Kitagawa) Tagawa マンシウクマワラビと同種である。

(36) *Polystichum Tsus-Simense* (Hook.) J. Sm. ヒメカナワラビは臺灣では阿里山だけに知られてゐたが, 中央山脈の高地には稀ではあるが所々にある。

(37) 臺灣の *Cyrtomium taiwanianum* Tagawa タカサゴヤブソテツは臺東廳下で發見されたが, これも稀ではあるが高雄州, 花蓮港廳下の深山で所々に發見した。

(38) 支那の *Ctenitis mariformis* (Rosenst.) Ching は臺灣の *C. Kawakamii* (Hayata) Ching ケヒメワラビの切込の浅い一型にすぎぬ。

(39) 臺灣や南支那にある *Leptogramma tottoides* H. Ito ホウライミゾシダは濟州島にもある。

(40) 印度北部から支那西南部にかけて分布してゐる *Phymatodes Stracheyi* Ching は臺灣の *Ph. quasidivariata* (Hayata) Ching ニヒタカウラボシと同種である。

(41) Faurie が長崎で採集した *Polypodium ellipticum* var. *simplicifrons* Christ ヒトツバイハヒトデは *Colysis elliptica* (Thunb.) Ching イハヒトデに比し, 葉は單葉又は不規則に羽裂し, 葉柄の上部には狭い翼がある。單葉のものは *C. Wrightii* (Hook.) Ching ヤリノホクリハランに似てゐるが, 邊緣に波狀の皺曲がなく, 主側脈は不明瞭, 葉柄は上半部にのみ狭い翼がある。それで種にあげて學名を *C. simplicifrons* (Christ) Tagawa と改めた。和歌山縣, 九州, 濟州島, 沖縄島, 久米島にあり, 秦仁昌によれば臺灣や南支那にもある。

(42) 廣西省嵯山の *Prosaptia urceolaris* (Hayata) Ching var. *intermedia* (Ching) Ching の學名を *P. intermedia* (Ching) Tagawa と改めた。

(43) *Ceratopteris thalictroides* (L.) Brongn. ミヅワラビは南鮮にもある。